

Title (en)

A METHOD FOR DETERMINING A DRAG TORQUE COEFFICIENT

Title (de)

VERFAHREN ZUR BESTIMMUNG EINES SCHLEPPMOMENTKOEFFIZIENTEN

Title (fr)

PROCÉDÉ PERMETTANT DE DÉTERMINER UN COEFFICIENT DE COUPLE DE TRAÎNÉE

Publication

EP 3816485 A1 20210505 (EN)

Application

EP 19206732 A 20191101

Priority

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Abstract (en)

A method for determining a drag torque coefficient (b) of a transmission. The method comprises performing rotational speed synchronisation involving application of synchronisation torque (T) to a first transmission component (32, 34), and obtaining an initial rotational speed of the first transmission component (32, 34) before the rotational speed synchronisation, and a final rotational speed of the first transmission component (32, 34) after the rotational speed synchronisation, and time period for performing the rotational speed synchronisation. The method further comprises obtaining information relating to a level of the synchronisation torque (T) applied to the first transmission component (32, 34) during the rotational speed synchronisation, and obtaining information relating to a total moment of inertia (J) associated with the first transmission component (32, 34). In addition, the method comprises determining the drag torque coefficient (b) based on the obtained initial rotational speed, the obtained final rotational speed, the obtained time period, the level of the applied synchronisation torque (T) and the total moment of inertia (J) associated with the first transmission component (32, 34). Furthermore, the disclosure also relates to corresponding transmission system.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [A] US 2018112770 A1 20180426 - HANSSON MATTHIAS [SE], et al
- [A] WO 2018215523 A1 20181129 - PUNCH POWERTRAIN NV [BE]
- [A] DE 102011016576 A1 20121011 - SCHAEFFLER TECHNOLOGIES GMBH [DE]

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Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 3816485 A1 20210505; **EP 3816485 B1 20221130**; CN 114616412 A 20220610; CN 114616412 B 20230728; US 11828361 B2 20231128; US 2022243806 A1 20220804; WO 2021082871 A1 20210506

DOCDB simple family (application)

EP 19206732 A 20191101; CN 2020119504 W 20200930; CN 202080076308 A 20200930; US 202217727485 A 20220422